

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for ordering encoded pictures, comprising:
forming encoded pictures in an encoder, wherein at least one group of pictures is formed,
defining a picture ~~ID~~ identification for each picture of the group of pictures,
transmitting said encoded pictures to a decoder, and
arranging the encoded pictures in decoding order,
wherein each of said at least one group of pictures comprises a video sequence ~~ID~~ identification separate from the picture ~~ID~~ identification for the encoded pictures,
wherein the video sequence ~~ID~~ identification is the same for each picture of the same group of pictures, and
wherein the video sequence ~~ID~~ identification is arranged to be used for determining which pictures belong to the same group of pictures.
2. (CANCELLED)
3. (Currently Amended) The method according to claim 1, **wherein** two or more groups of pictures are formed, and different video sequence ~~ID~~ identifications are defined for said two or more groups of pictures.
4. (Currently Amended) The method according to claim 3, **wherein** the decoding order of the pictures is determined according to the video sequence ~~ID~~ identification.
5. (Currently Amended) The method according to claim 3, **wherein** the decoding order of the video sequence ~~ID~~ identifications are transmitted on a transmission layer, and the picture ~~ID~~ identifications are transmitted a on video layer.
6. (Currently Amended) A method for decoding an encoded picture stream in a decoder, said stream comprising at least one group of pictures, for each picture of the group of pictures a

picture ID identification has been defined, and for the group of pictures a video sequence ID identification separate from the picture ID identification has been defined, wherein the video sequence ID identification is the same for each picture of the same group of pictures, and wherein in the decoding, the video sequence ID identification is used for determining which pictures belong to the same group of pictures.

7. (Currently Amended) The method according to claim 6, **wherein** one picture of each group of pictures is an independently decodable picture for which said video sequence ID identification is defined, at least one sub-sequence is formed of the pictures of the group of pictures, and that each picture of the sub-sequence has the same video sequence ID identification as the independently decodable picture of the same group of pictures.

8. (Currently Amended) An encoder for encoding pictures and for ordering encoded pictures, comprising:

- an arranger for forming at least one group of pictures of the encoded pictures and defining a picture ID identification for each picture of the group of pictures, and

- a definer for defining a video sequence ID identification separate from the picture ID identification for the encoded pictures,

- wherein the group of pictures comprises the video sequence ID identification,

- wherein the video sequence ID identification is arranged to be the same for each picture of the same group of pictures, and

- wherein the video sequence ID identification is arranged to be used for determining which pictures belong to the same group of pictures.

9. (Currently Amended) A decoder for decoding encoded pictures, and for forming decoded pictures, said encoded pictures comprising at least one group of pictures, and for the group of pictures a video sequence ID identification separate from a picture ID identification has been defined, wherein the video sequence ID identification is the same for each picture of the same group of pictures, said decoder further comprising a rearranger for arranging the encoded

pictures in decoding order, and a processor for determining which pictures belong to the same group of pictures by using the video sequence ID identification.

10. (Currently Amended) A computer readable medium encoded with computer executable instructions for performing a method for ordering encoded pictures, the method comprising:

forming encoded pictures in an encoder, wherein at least one group of pictures is formed,
defining a picture ID identification for each picture of the group of pictures,
transmitting said encoded pictures to a decoder, and
arranging the encoded pictures in decoding order,

wherein each of said at least one group of pictures comprises a video sequence ID identification separate from the picture ID identification for the encoded pictures,

wherein the video sequence ID identification is the same for each picture of the same group of pictures, and

wherein the video sequence ID identification is arranged to be used for determining which pictures belong to the same group of pictures.

11. (CANCELLED)

12. (Currently Amended) A method for ordering encoded pictures comprising a first and a second encoded picture, comprising:

forming at least a first transmission unit on the basis of the first encoded picture, and
forming at least a second transmission unit on the basis of the second encoded picture,

wherein a first video sequence ID identification is defined for said first transmission unit and a second video sequence ID identification is defined for said second transmission unit,
wherein the first video sequence ID identification is the same as the second video sequence ID identification when the first and the second encoded picture belong to a same group of pictures,
and

wherein a first identifier is defined for said first transmission unit and a second identifier is defined for said second transmission unit, the first and the second identifiers being indicative

of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit.

13. (Original) The method according to claim 12, **wherein** the identifier is defined as an integer number.

14. (Original) The method according to claim 13, **wherein** a larger integer number with wrap around indicates a later decoding order.

15. (Original) The method according to claim 12, **wherein** said first transmission unit includes a first slice and said second transmission unit includes a second slice.

16. (Currently Amended) A device for ordering encoded pictures comprising a first and a second encoded picture, the device comprising:

an arranger for forming at least a first transmission unit on the basis of the first encoded picture and at least a second transmission unit on the basis of the second encoded picture, and

a definer for defining a first video sequence ~~ID~~ identification for said first transmission unit and a second video sequence ~~ID~~ identification for said second transmission unit, wherein the first video sequence ~~ID~~ identification is the same as the second video sequence ~~ID~~ identification when the first and the second encoded picture belong to a same group of pictures, and for defining a first identifier for said first transmission unit and a second identifier for said second transmission unit, the first and the second identifiers being indicative of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit.

17. (Original) The device according to claim 16, **wherein** it is a gateway device.

18. (Original) The device according to claim 16, **wherein** it is a mobile communication device.

19. (Original) The device according to claim 16, **wherein** it is a streaming server.

20. (Currently Amended) An encoder for encoding pictures and for ordering encoded pictures comprising a first and a second encoded picture, the encoder comprising:

an arranger for forming at least a first transmission unit on the basis of the first encoded picture and at least a second transmission unit on the basis of the second encoded picture, and

a definer for defining a first video sequence ~~ID~~ identification for said first transmission unit and a second video sequence ~~ID~~ identification for said second transmission unit, wherein the first video sequence ~~ID~~ identification is the same as the second video sequence ~~ID~~ identification when the first and the second encoded picture belong to a same group of pictures, and for defining a first identifier for said first transmission unit and a second identifier for said second transmission unit, the first and the second identifiers being indicative of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit.

21. (Original) The device according to claim 20, **wherein** said arranger is arranged to include a first slice into said first transmission unit and a second slice into said second transmission unit.

22. (Currently Amended) A decoder for decoding encoded pictures for forming decoded pictures, the encoded pictures comprising a first and a second encoded picture transmitted in at least a first transmission unit formed on the basis of the first encoded picture and in at least a second transmission unit formed on the basis of the second encoded picture, **wherein** the decoder comprises a processor for determining the decoding order of information included in the first transmission unit and information included in the second transmission unit on the basis of a first identifier defined for said first transmission unit and a second identifier defined for said second transmission unit, said processor further for determining whether the information included in the first transmission unit and information included in the second transmission unit belong to pictures in a same group of pictures on the basis of a first video sequence ~~ID~~ identification defined for said first transmission unit and a second video sequence ~~ID~~ identification defined for said second transmission unit.

23. (Currently Amended) A system comprising:

an encoder for encoding pictures and for ordering encoded pictures comprising a first and a second encoded picture, the encoder comprising an arranger for forming at least a first transmission unit on the basis of the first encoded picture and at least a second transmission unit on the basis of the second encoded picture, and

a decoder for decoding the encoded pictures,

wherein the system further comprises:

in the encoder a definer for defining a first video sequence ID identification for said first transmission unit and a second video sequence ID identification for said second transmission unit, wherein the first video sequence ID identification is the same as the second video sequence ID identification when the first and the second encoded picture belong to a same group of pictures, and for defining a first identifier for said first transmission unit and a second identifier for said second transmission unit, the first and the second identifiers being indicative of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit, and

a processor in the decoder for determining the decoding order of information included in the first transmission unit and information included in the second transmission unit on the basis of said first identifier and said second identifier, said processor further for determining whether the information included in the first transmission unit and information included in the second transmission unit belong to pictures in a same group of pictures on the basis of the first video sequence ID identification defined for said first transmission unit and the second video sequence ID identification defined for said second transmission unit.

24. (Currently Amended) A computer readable medium encoded with computer executable instructions for performing a method for ordering encoded pictures comprising a first and a second encoded picture, for forming at least a first transmission unit on the basis of the first encoded picture, and at least a second transmission unit on the basis of the second encoded picture, **wherein** the computer program further comprises computer executable instructions for defining a first video sequence ID identification for said first transmission unit and a second video sequence ID identification for said second transmission unit, wherein the first video

sequence ID identification is the same as the second video sequence ID identification when the first and the second encoded picture belong to a same group of pictures, and for defining a first identifier for said first transmission unit and a second identifier for said second transmission unit, the first and the second identifiers being indicative of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit.

25. (Currently Amended) A computer readable medium encoded with computer executable instructions for performing a method for ordering encoded pictures comprising a first and a second encoded picture, for forming at least a first transmission unit on the basis of the first encoded picture, and at least a second transmission unit on the basis of the second encoded picture, **wherein** the computer program further comprising computer executable instructions for defining a first video sequence ID identification for said first transmission unit and a second video sequence ID identification for said second transmission unit, wherein the first video sequence ID identification is the same as the second video sequence ID identification when the first and the second encoded picture belong to a same group of pictures, and for defining a first identifier for said first transmission unit and a second identifier for said second transmission unit, the first and the second identifiers being indicative of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit.

26. (CANCELLED)

27. (Currently Amended) A module for ordering encoded pictures for transmission, the encoded pictures comprising a first and a second encoded picture, the module comprising:

an arranger for forming at least a first transmission unit on the basis of the first encoded picture and at least a second transmission unit on the basis of the second encoded picture, and

a definer for defining a first video sequence ID identification for said first transmission unit and a second video sequence ID identification for said second transmission unit, wherein the first video sequence ID identification is the same as the second video sequence ID identification

when the first and the second encoded picture belong to a same group of pictures, and for defining a first identifier for said first transmission unit and a second identifier for said second transmission unit, the first and the second identifiers being indicative of the respective decoding order of information included in the first transmission unit and information included in the second transmission unit.

28. (Currently Amended) A module for reordering encoded pictures for decoding, the encoded pictures comprising a first and a second encoded picture transmitted in at least a first transmission unit formed on the basis of the first encoded picture and in at least a second transmission unit formed on the basis of the second encoded picture, **wherein** the module comprises a processor for determining the decoding order of information included in the first transmission unit and information included in the second transmission unit on the basis of a first identifier defined for said first transmission unit and a second identifier defined for said second transmission unit, said processor further for determining whether the information included in the first transmission unit and information included in the second transmission unit belong to pictures in a same group of pictures on the basis of a first video sequence ~~ID~~ identification defined for said first transmission unit and a second video sequence ~~ID~~ identification defined for said second transmission unit.

29. (Previously Presented) The module according to claim 27, wherein said arranger is configured to include a first slice into said first transmission unit and a second slice into said second transmission unit.